

WHAT IS CLAIMED IS:

- Sub A³* > 1. A method for testing a decoder of a digital bitstream comprising:
applying a test bitstream to the decoder to decode the test bitstream,
wherein the test bitstream includes at least one picture representing at least in part a reference image portion, wherein the at least one picture includes a region that is a direct-coded representation of the reference image portion and a region that is an indirect-coded representation of the reference image portion, whereby the decoder produces at least one picture including a decoded direct-coded region representative of the reference image portion and a decoded indirect-coded region representative of the reference image portion;
and
comparing the decoded direct-coded and decoded indirect-coded regions representative of the reference image portion.
2. The method of claim 1 wherein the direct-coded representation is intra-coded, representation, and wherein the indirect coded representation is one of predictively coded and bidirectionally-coded.
3. The method of claim 1 wherein the test bitstream is one of an MPEG bitstream and an MPEG-like bitstream.
4. The method of claim 1 wherein the reference image portion includes at least one indicia, at least a portion of the indicia being in the region that is a direct-coded representation of the reference image portion and at least a portion of the indicia being in the region that is an indirect-coded representation of the reference image portion, and wherein said comparing includes comparing the respective portions of the indicia in the decoded direct-coded and decoded indirect-coded regions.

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5. The method of claim 1 wherein said the test bitstream includes at least one additional picture of a sequence of pictures that is a direct-coded representation of the reference image portion and that follows the at least one picture that includes direct coded and indirect coded representations of the reference image portion.
6. The method of claim 5 further comprising repeatedly inserting the additional picture into the sequence of pictures at one of regular and irregular intervals.
7. A method for producing a test bitstream including a sequence of pictures representing at least a reference image portion, comprising:
producing a bitstream of at least one picture of the sequence of pictures that includes a region that includes a direct-coded representation of the reference image portion and a region that includes an indirect-coded representation of the reference image portion.
8. The method of claim 7 wherein the direct-coded representation is intra-coded, and wherein the indirect coded representation is one of predictively coded and bidirectionally-coded.
9. The method of claim 7 wherein producing a bitstream includes producing one of an MPEG bitstream and an MPEG-like bitstream.
10. The method of claim 7 wherein the reference image portion has at least one indicia, at least a portion of the indicia being in the region that is a direct-coded representation of the reference image portion and at least a portion of the indicia being in the region that is an indirect-coded representation of the reference image portion.

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11. The method of claim 7 further comprising producing in the bitstream at least one additional picture of the sequence of pictures that is a direct-coded representation of the reference image portion and that follows the at least one picture that includes direct coded and indirect coded representations of the reference image portion.
12. The method of claim 11 further comprising repeatedly inserting the additional picture into the sequence of pictures at one of regular and irregular intervals.
13. Apparatus for generating a test bitstream including a sequence of pictures representing at least one reference image portion, comprising:
 - a generator of a bitstream of at least one picture of the sequence of pictures that includes a region that is a direct-coded representation of the reference image portion and a region that is an indirect-coded representation of the reference image portion.
14. The apparatus of claim 13 wherein the direct coded representation is intra-coded and wherein the indirect coded representation is one of predictively coded and bidirectionally-coded.
15. The apparatus of claim 13 wherein said generator includes a generator of one of an MPEG bitstream and an MPEG-like bitstream.

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16. The apparatus of claim 13 in combination with:
- means for applying the bitstream from said generator to a video decoder, wherein the video decoder decodes the bitstream;
 - means coupled to said video decoder for observing a decoded image having a first decoded region responsive to the direct-coded representation of the reference image portion and a second decoded region responsive to the indirect-coded representation of the reference image portion.
17. The apparatus of claim 13 wherein the reference image portion has at least one indicia, at least a portion of the indicia being in the region that includes a direct-coded representation of the reference image portion and at least a portion of the indicia being in the region that includes a indirect-coded representation of the reference image portion.
18. The apparatus of claim 13 wherein said generator of a bitstream further generates at least one additional picture of the sequence of pictures that is a direct-coded representation of the reference image portion and that follows the at least one picture that includes direct coded and indirect coded representations of the reference image portion.
19. The apparatus of claim 18 wherein said generator repeatedly inserts the additional picture into the sequence of pictures at one of regular and irregular intervals.
20. A bitstream for testing a decoder comprising a coded representation of a sequence of pictures wherein at least one picture of the sequence of pictures includes a region that is a direct-coded representation of a reference image portion and a region that is an indirect-coded representation of the reference image portion.

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21. The bitstream of claim 20 wherein the direct coded representation is intra-coded, and wherein the indirect coded representation is one of predictively coded and bidirectionally-coded.
22. The bitstream of claim 20 wherein the bitstream is one of an MPEG bitstream and an MPEG-like bitstream.
23. The bitstream of claim 20 wherein the reference image portion has at least one indicia, at least a portion of the indicia being in the region that is a direct-coded representation of the reference image portion and at least a portion of the indicia being in the region that is an indirect-coded representation of the reference image portion.
24. The bitstream of claim 20 further including at least one additional picture of the sequence of pictures that includes a direct-coded representation of the reference image portion and that follows at least some of the pictures of the sequence of pictures.
25. The bitstream of claim 24 wherein the additional picture of the sequence of pictures that includes a direct-coded representation of the reference image portion is repeatedly inserted into the sequence of pictures at one of regular and irregular intervals.

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26. A storage medium encoded with machine-readable computer instructions for producing a coded bitstream wherein the coded bitstream includes a sequence of pictures representative of at least one reference image portion, comprising:
- means for causing a computer to produce a coded bitstream that includes at least one picture of the sequence of pictures that includes a direct-coded representation of the reference image portion and an indirect-coded representation of the reference image portion.
27. The storage medium of claim 26 wherein said means for causing a computer to produce a bitstream includes means for causing the computer to produce an intra-coded representation of the reference image portion.
28. The storage medium of claim 26 wherein said means for causing a computer to produce a bitstream includes means for causing the computer to produce one of a predictively coded and a bidirectionally-coded representation of the reference image portion.
29. The storage medium of claim 26 wherein said means for causing a computer produce a bitstream produces one of an MPEG bitstream portion and an MPEG-like bitstream portion.

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